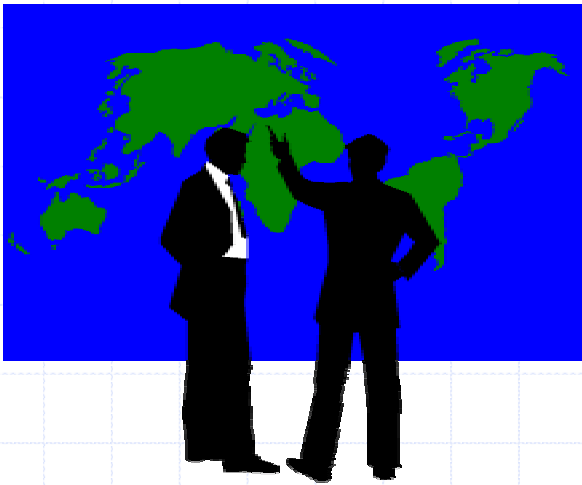




U.S. Department of Energy

OAK RIDGE NATIONAL LABORATORY

# CHP Subcontractors Coordination Review Meeting



April 22, 2004  
Oak Ridge National Laboratory's  
Washington D.C. Office

Name of Contract and Subcontractors

## Distributed Energy Resources in Metropolitan Planning

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# Description of Task(s)

## *Further the Deployment of CHP in Metropolitan Infrastructure Planning*

### *Deliverables & Objectives*

#### **1. *National Guide for Sustainable Metropolitan Energy Planning***

- A resource guide to sustainable energy planning, technologies and best management practices for elected local officials, community planners & private developers
  - Electric Power Production
  - Combined Heat and Power
  - Energy Efficiency
  - Transportation
  - Project Financing
  - Community Implementation

#### **2. *National Model for Sustainable Urban Design***

- An alternative model for community development that optimizes the use of energy resources across all sectors to achieve future economic growth without compromising local or global environmental quality
- A process enabling communities to chart their own sustainable development path
- An evolutionary roadmap identifying the economic, institutional, technological, and social steps necessary to successfully pursue a sustainable development path

# Description of Progress Against Task(s)

- *National Guide for Sustainable Metropolitan Energy Planning*
  - Guide has been completed and published
- *Barriers/Challenges*
  - Case studies of success stories required considerable effort
  - Intensive peer review took a considerable amount of time
  - Special challenge to make relevant to needs of smaller communities
  - Challenge to translate energy lingo into planning vocabulary
    - Combined Heat and Power
    - Renewables
    - Energy Efficiency
    - Alternative Fueled Vehicles

# Description of Progress Against Task(s) cont.

- *National Model for Sustainable Urban Design*
  - Model Design has been completed and published
  - Design won 2<sup>nd</sup> place among nine entries in global competition
  - Design featured in very popular DVD, now in 34 countries
- *Barriers/Challenges*
  - Addressing need for reliable sources of high quality energy
  - Utilization of locally available sources of renewable energy
  - Moving from grid-based to local micro-grid energy infrastructure
  - Portraying a total system approach to energy development & end use
    - Heat Used for Hot Water or Desiccant Cooling Applications
    - Local Methane and Hydrogen Fuels
    - Community-scale CHP Energy Grid
  - Complex Stakeholder Process & limited timeframe
    - Involved 185 participants, 85 organizations in two nations
    - 7 months to complete consensus framework for the design

# FY03 Deliverables and Availability

- *National Guide for Sustainable Metropolitan Energy Planning*
  - 110-page document
  - Electronic versions available upon request or at [www.gastechnology.org/sustainability](http://www.gastechnology.org/sustainability)
- *National Model for Sustainable Urban Design*
  - 83-page document
  - Electronic versions available upon request or at [www.gastechnology.org/sustainability](http://www.gastechnology.org/sustainability)
- *Energizing Sustainable Cities DVD*
  - 20-minute professional multi-media DVD presentation
  - Available at [www.gastechnology.org/sustainability](http://www.gastechnology.org/sustainability)

# Coordination with Stakeholder Groups and Other Project Teams

- *Expert Input into Final Documents*
  - John Jimison, USCHPA
  - Rich Scheer, Energetics
  - Rich Sweetser, Exergy Partners
  - Rob Thornton, IDEA
  - Luis Troche, EPA CHPA
  - Walter Woods, American Gas Foundation
  
- *Continued Coordination Post-Contract*
  - U.S. Department of Energy EERE
  - U.S. Department of Energy Office International Affairs
  - American Council for Energy Efficient Economy (ACEEE)
  - Energetics



# FY04-05 Timeline (post contract)

- *Global Energy Center for Community Sustainability*
  - 501(c)3 nonprofit organization to leverage public & private funding to promote sustainable community energy development & use
  - DOE/GTI initiative to be announced at UN on April 28<sup>th</sup>,
    - Global Announc. -World Energy Congress – Sept '04 Sydney, Australia
- *California Sustainable Communities Project*
  - Characterize community sustainable energy needs & barriers
    - Statewide assessment
  - Regional training & problem-solving workshops
    - Sacramento, San Francisco, Los Angeles, San Diego
  - Development of needed community development resources
  - Funded by CEC, GTI, SEMPRA Energy Utilities & other CA IOUs



# Questions?

## Sustainable Energy Planning Office

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